

PATENT SPECIFICATION
DRAWINGS ATTACHED

907,867



Date of filing Complete Specification Sept. 2, 1959.

Application Date Aug. 27, 1957.

No. 26940 57.

Complete Specification Published Oct. 10, 1962.

Index at acceptance:—Class 91, D2(L:N:T:X), S11.

International Classification:—C11d.

COMPLETE SPECIFICATION

An Improved Soap or Synthetic Detergent Impregnated Sponge

I, VILLIS MICHAELS, of Latvian Nationality, of Michaels Garage (Selby) Limited, Barlby Road, Selby, Yorkshire, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a sponge which is impregnated with soap or other detergent cleansing substance.

According to the invention a natural or artificial sponge material is impregnated with a heated liquid soap or synthetic detergent substance which solidifies on cooling to room temperature. The soap or synthetic detergent may be with or without perfume as desired, and the impregnation may be by injection means operated by hand or by machine. Preferably the impregnation may be confined to points or places at or about the centre of the sponge material.

In order that the invention may be clearly understood and readily carried into effect the same will now be more fully described by aid of the accompanying drawings which illustrates diagrammatically one form of the invention applied to a rectangular sponge.

Referring to the drawings, a rectangular or other shaped piece of synthetic sponge material 1 is injected at one or more places 2 by means of hollow needles or tubes with a heated soap or synthetic detergent in liquid form which material (when cool) solidifies to form a block or blocks 3 of solid soap or synthetic detergent at or about the centre of the synthetic sponge material. The injected soap or synthetic detergent, when solidified may be of elongated tubular form within the sponge as shown and in this connection, whilst two are shown, there may be any number of lengths of solid soap or synthetic detergent depending upon the number of injections made into the sponge material.

Instead of being rectangular the synthetic

sponge material may be tubular for fitting into a casing or container through which water can be passed. Alternatively the rectangular or other form of synthetic sponge material may be mounted in a holder which permits one or more sides or faces of the sponge material to project for contacting a surface to be wiped or cleaned, water being absorbed into the sponge by immersing the latter or by passing a stream of water through the sponge.

It will be seen that the sponge material acts as a retainer for the soap which, when the sponge is either dipped in or has water passed through it, permits the soap to pass from the inside to the outer surfaces of the sponge until all the impregnated soap is dissolved.

Preferably a hard pure soap is used but other soaps capable of being injected in heated liquid form and then solidifying may be used.

A suitable detergent composition may comprise 85% by weight alkyl aryl sulphonate, 10% by weight sodium alkyl sulphate and 5% by weight paraffin wax. The sodium alkyl sulphate may vary between 5% and 20% with corresponding increase or decrease in weight of alkylaryl sulphonate. The paraffin wax will have a melting point of 70° C.—75° C. The detergent composition is prepared by heating the sodium alkyl sulphate and wax to 80° C. or above and then adding the detergent powder whilst the heated liquid is being stirred or agitated.

WHAT I CLAIM IS:—

1. A natural or artificial sponge material which is impregnated with a heated liquid soap or synthetic detergent substance which solidifies on cooling to room temperature.
2. A natural or artificial sponge material according to Claim 1, wherein the soap or synthetic detergent substance is with or without perfume as desired, and the impregnation

BEST AVAILABLE COPY

is achieved by injection means operated by hand or by machine.

3. A natural or artificial sponge material according to Claim 1 or Claim 2, wherein the impregnation is confined to points or places at or about the centre of the sponge material.

4. A natural or artificial sponge material according to any of the preceding claims, wherein the injected soap or synthetic detergent when solidified, is of elongated tubular form within the sponge.

5. A natural or artificial sponge material substantially as described and as illustrated in the accompanying drawing.

JOHN E. WALSH & CO.,
Chartered Patent Agents,
Leeds and London.

Reference has been directed in pursuance of Section 9, subsection (1) of the Patents Act, 1949, to Patent No. 848,413.

PROVISIONAL SPECIFICATION

An Improved Soap or Synthetic Detergent Impregnated Sponge

15 I, VILLIS MICHAELS, of Latvian Nationality, of Michaels Garage (Selby) Limited, Barlby Road, Selby, Yorkshire, do hereby declare this invention to be described in the following statement:—

20 This invention relates to a sponge which is impregnated with soap or detergent or like cleansing substance.

According to the invention a natural, synthetic or artificial sponge material is impregnated with a liquid soap, detergent or like substance which solidifies on cooling. The soap, detergent or like substance may be with or without perfume as desired, and the impregnation may be by injection means operated by hand or by machine. Preferably the impregnation may be confined to points or places at or about the centre of the sponge material.

35 In a practical embodiment of the invention, a rectangular or other shaped piece of synthetic sponge material is injected at one or more places by means of hollow needles, tubes or the like with a soap or detergent material in liquid form which solidifies to form a block of solid soap or detergent material at or about the centre of the synthetic sponge material. The injected soap or detergent material, when solidified may be of elongated tubular form within the sponge and

in this connection, there may be a plurality of lengths of solid soap or detergent material depending upon the number of injections made into the sponge material.

Instead of being rectangular the synthetic sponge or like material may be tubular for fitting into a casing or container through which water is or can be passed. Alternatively the rectangular or other form of synthetic sponge or like material may be mounted in a holder which permits one or more sides or faces of the sponge material to project for contacting a surface to be wiped or cleaned, water being absorbed into the sponge by immersing the latter or by passing a stream of water through the sponge.

It will be seen that the sponge or like material acts as a retainer for the soap which, when the sponge is either dipped in or has water passed through it, permits the soap to pass from the inside to the outer surfaces of the sponge or the like until all the impregnated soap is dissolved.

Preferably a hard pure soap is used but other soaps or detergents capable of being injected in liquid form and then solidifying may be used.

JOHN E. WALSH & CO.,
Chartered Patent Agents,
Leeds and London.

Leamington Spa: Printed for Her Majesty's Stationery Office by the Courier Press.—1962.
Published at The Patent Office, 25, Southampton Buildings, London, W.C.2, from which copies may be obtained.

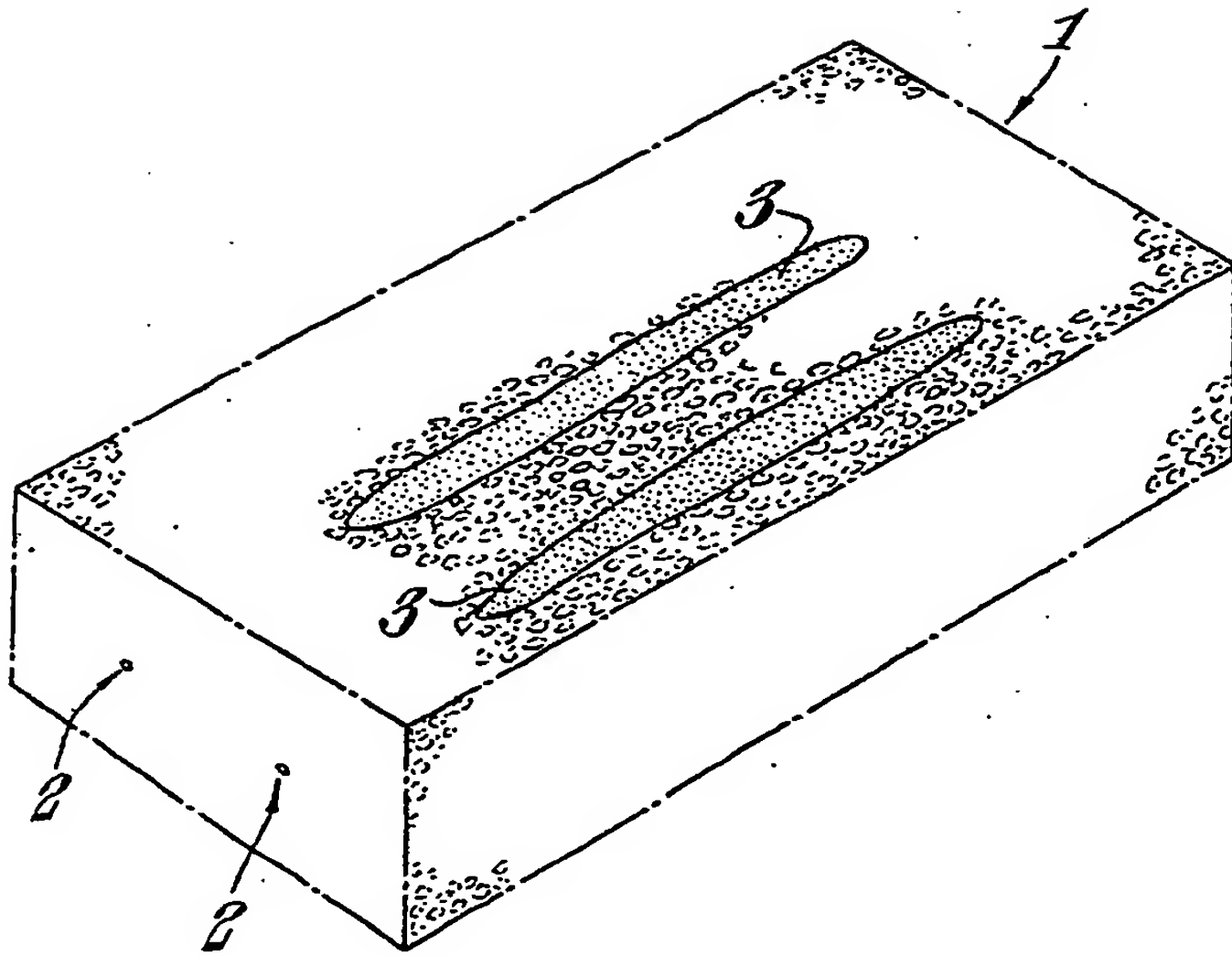
BEST AVAILABLE COPY

907867

COMPLETE SPECIFICATION

1 SHEET

*This drawing is a reproduction of
the Original on a reduced scale*



BEST AVAILABLE COPY

THIS PAGE BLANK (USPTO)